ABSTRACT

A composite textile article for garments which are useful as a barrier for chemical and biological contaminants, such as nerve gas and infectious microorganisms from a surrounding atmosphere. The composite textile article has a sheet of a water vapor permeable central textile fabric composed of polymeric multilobal fibers, having a central core and T-shaped lobes projecting therefrom, and which sheet of central textile fabric has been impregnated with at least one biological and/or chemical decontamination reagent in an amount sufficient to chemically modify, neutralize and/or decontaminate chemical and/or biological contaminants. A pair of sheets of outer textile fabrics, are positioned on the front and rear sides of the central textile fabric. The sheet of central textile fabric and the pair of sheets of outer textile fabrics are attached together via a sealed hem around their perimeter such that it prevents the at least one biological and/or chemical decontamination reagent from passing through the hem.